AMENDMENTS TO THE CLAIMS

1. (Previously presented) A process for preparing high-concentration gaseous formaldehyde having a molar $CH_2O : H_2O$ ratio of ≥ 0.6 from an aqueous formaldehyde solution by evaporation of at least part of the solution, in which the aqueous formaldehyde solution is heated to a evaporation temperature T and the gas phase formed is taken off, wherein the evaporation temperature T obeys the relationship:

$$T \, [°C] \geq T'_{min} \, [°C]$$

where $T'_{min}(c) = A + B \times (c/100) + C \times (c/100)^2 + D \times (c/100)^3$

and

$A = + 68.759, B = + 124.77, C = - 12.851, D = - 10.095,$

where c is the instantaneous CH_2O content of the aqueous formaldehyde solution during the evaporation in percent by weight and is from 20 to 99% by weight.

2. (Previously presented) A process as claimed in claim 1, wherein the aqueous formaldehyde solution used as starting material in the process has CH_2O content of from 50 to 99% by weight.

3. (Previously presented) A process as claimed in claim 2, wherein the aqueous formaldehyde solution has CH_2O content of from 70 to 90% by weight.

4. (Previously presented) A process as claimed in claim 1, wherein the pressure during the evaporation is from 0.1 to 50 bar.

5. (Previously presented) A process as claimed in claim 1, wherein the molar $CH_2O : H_2O$ ratio is ≥ 1.4.

6. (Currently amended) A process as claimed in ~~any of~~ claim 1, wherein a temperature which obeys the relationship

$$T \, [°C] \geq T''_{min} \, [°C]$$

~~where T²~~ where $T''_{min}(c) = A' + B' \times (c/100) + C' \times (c/100)^2 + D' \times (c/100)^3$

and

$A' = + 6.0156$, $B' = + 52.918$, $C' = + 49.699$, $D' = + 34.286$,

where c is the instantaneous CH_2O content of the aqueous formaldehyde solution during the evaporation in percent by weight and is from 20 to 99% by weight, is maintained in the aqueous formaldehyde solution at every point in the evaporator.

7. (Previously presented) A process as claimed in claim 1, wherein the evaporation is carried out in a stirred vessel, a helical tube, a film evaporator or another apparatus having heat exchanger characteristics.

8. (Previously presented) A process as claimed in claim 1, wherein the aqueous formaldehyde solution used as starting material in the process is prepared by oxidative dehydrogenation of methanol.

9. (Canceled)

10. (New) A process for preparing high-concentration gaseous formaldehyde having a molar $CH_2O : H_2O$ ratio of ≥ 0.6 from an aqueous formaldehyde solution by evaporation of at least part of the solution, in which the aqueous formaldehyde solution is heated to a evaporation temperature T and the gas phase formed is taken off, wherein the evaporation temperature T obeys the relationship:

$$T \,[°C] \geq T'_{min} \,[°C]$$

where $T'_{min}(c) = A + B \times (c/100) + C \times (c/100)^2 + D \times (c/100)^3$

and

$A = + 68.759$, $B = + 124.77$, $C = - 12.851$, $D = - 10.095$,

where c is the instantaneous CH_2O content of the aqueous formaldehyde solution during the evaporation in percent by weight and is from 20 to 99% by weight and wherein the aqueous

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formaldehyde solution used as starting material in the process has CH_2O content of from 50 to 99% by weight.

11.   (New) A process as claimed in claim 10, wherein the aqueous formaldehyde solution used as starting material has CH_2O content of from 70 to 90% by weight.

12.   (New) A process as claimed in claim 11, wherein the pressure during the evaporation is from 0.1 to 50 bar.

13.   (New) A process as claimed in claim 12, wherein the molar $CH_2O : H_2O$ ratio is ≥ 1.4.

14.   (New) A process as claimed in claim 13, wherein a temperature which obeys the relationship

$$T \, [°C] \geq T''_{min} \, [°C]$$

where $T''_{min}(c) = A' + B' \times (c/100) + C' \times (c/100)^2 + D' \times (c/100)^3$

and

$A' = + 6.0156, \, B' = + 52.918, \, C' = + 49.699, \, D' = + 34.286,$

where c is the instantaneous CH_2O content of the aqueous formaldehyde solution during the evaporation in percent by weight and is from 20 to 99% by weight, is maintained in the aqueous formaldehyde solution at every point in the evaporator.

15.   (New) A process as claimed in claim 14, wherein the evaporation is carried out in a stirred vessel, a helical tube, a film evaporator or another apparatus having heat exchanger characteristics.

16.   (New) A process as claimed in claim 15, wherein the aqueous formaldehyde solution used as starting material in the process is prepared by oxidative dehydrogenation of methanol.